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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/993,363

DATE: 12/03/2001

TIME: 14:00:29

Input Set : A:\Arcd382.app

Output Set: N:\CRF3\11212001\I993363.raw

**ENTERED**

3 <110> APPLICANT: ASHTON-RICKARDT, PHILIP G.  
4 OFFERMAN, JOSEPH T.  
5 PHILLIPS, TIPHANIE  
7 <120> TITLE OF INVENTION: INDUCTION OF VIRAL IMMUNITY USING INHIBITORS OF  
8 GRANZYMES  
10 <130> FILE REFERENCE: ARCD:382USP1  
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/993,363  
13 <141> CURRENT FILING DATE: 2001-11-14  
15 <160> NUMBER OF SEQ ID NOS: 16  
17 <170> SOFTWARE: PatentIn Ver. 2.1  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 1626  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Homo sapiens  
24 <400> SEQUENCE: 1

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27 ctctttctaa tgcaagtggg acttttgcca tacgcctttt aaagatactg tgtcaagata 180
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34 aaattgaaga gttgttgcg ggtagctcaa ttgatgcaga aaccaggctg gttcttgta 600
35 atgccatcta ctcaaaagga aagtggaaatg aaccgtttga cgaaacatac acaagggaaa 660
36 tgccctttta aataaaccag gaggagcaaa ggccagtgc gatgatgtat caggaggcca 720
37 cgtttaagct cgcacacgtg ggcgaggtgc gcgcgcagct gctggagctg ccctacgcca 780
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47 ggccatagaa gccaagtgc aagatgaggg cagattcctt acctgtctgc cctcatgatt 1380
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49 aaatagacca taatgattcc ctgttgattt aaaattgcca tccccgaat tcccatagga 1500
50 tggcaagcaa agttcttcta gaattccaca tgcaattcac tctggcgacc ctgtgctttc 1560
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55 <210> SEQ ID NO: 2
56 <211> LENGTH: 376
57 <212> TYPE: PRT
58 <213> ORGANISM: Homo sapiens

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60 &lt;400&gt; SEQUENCE: 2

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61 Met Glu Thr Leu Ser Asn Ala Ser Gly Thr Phe Ala Ile Arg Leu Leu
62   1           5           10           15
64 Lys Ile Leu Cys Gln Asp Asn Pro Ser His Asn Val Phe Cys Ser Pro
65           20           25           30
67 Val Ser Ile Ser Ser Ala Leu Ala Met Val Leu Leu Gly Ala Lys Gly
68           35           40           45
70 Asn Thr Ala Thr Gln Met Ala Gln Ala Leu Ser Leu Asn Thr Glu Glu
71           50           55           60
73 Asp Ile His Arg Ala Phe Gln Ser Leu Leu Thr Glu Val Asn Lys Ala
74   65           70           75           80
76 Gly Thr Gln Tyr Leu Leu Arg Thr Ala Asn Arg Leu Phe Gly Glu Lys
77           85           90           95
79 Thr Cys Gln Phe Leu Ser Thr Phe Lys Glu Ser Cys Leu Gln Phe Tyr
80           100          105          110
82 His Ala Glu Leu Lys Glu Leu Ser Phe Ile Arg Ala Ala Glu Glu Ser
83           115          120          125
85 Arg Lys His Ile Asn Thr Trp Val Ser Lys Lys Thr Glu Gly Lys Ile
86           130          135          140
88 Glu Glu Leu Leu Pro Gly Ser Ser Ile Asp Ala Glu Thr Arg Leu Val
89 145          150          155          160
91 Leu Val Asn Ala Ile Tyr Phe Lys Gly Lys Trp Asn Glu Pro Phe Asp
92           165          170          175
94 Glu Thr Tyr Thr Arg Glu Met Pro Phe Lys Ile Asn Gln Glu Glu Gln
95           180          185          190
97 Arg Pro Val Gln Met Met Tyr Gln Glu Ala Thr Phe Lys Leu Ala His
98           195          200          205
100 Val Gly Glu Val Arg Ala Gln Leu Leu Glu Leu Pro Tyr Ala Arg Lys
101          210          215          220
103 Glu Leu Ser Leu Leu Val Leu Leu Pro Asp Asp Gly Val Glu Leu Ser
104 225          230          235          240
106 Thr Val Glu Lys Ser Leu Thr Phe Glu Lys Leu Thr Ala Trp Thr Lys
107          245          250          255
109 Pro Asp Cys Met Lys Ser Thr Glu Val Glu Val Leu Leu Pro Lys Phe
110          260          265          270
112 Lys Leu Gln Glu Asp Tyr Asp Met Glu Ser Val Leu Arg His Leu Gly
113          275          280          285
115 Ile Val Asp Ala Phe Gln Gln Gly Lys Ala Asp Leu Ser Ala Met Ser
116          290          295          300
118 Ala Glu Arg Asp Leu Cys Leu Ser Lys Phe Val His Lys Ser Phe Val
119 305          310          315          320
121 Glu Val Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala Ser Ser Cys Phe
122          325          330          335
124 Val Val Ala Glu Cys Cys Met Glu Ser Gly Pro Arg Phe Cys Ala Asp
125          340          345          350
127 His Pro Phe Leu Phe Phe Ile Arg His Asn Arg Ala Asn Ser Ile Leu
128          355          360          365
130 Phe Cys Gly Arg Phe Ser Ser Pro
131          370          375

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135 <211> LENGTH: 1819
136 <212> TYPE: DNA
137 <213> ORGANISM: Mus musculus
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142 aaaatgtatg ttattctcct gcgagcatct cctctgctct agctatgggt ctcttgggtg 180
143 caaagggaca gacggcagtc cagatatctc aggcaattgg tttgaataaa gaggaaggca 240
144 tccatcaggg tttccagttg cttctcagga agctgaacaa gccagacaga aagtactctc 300
145 ttagagtggc caacaggctc tttgcagaca aaacttgtga agtcctcaa acctttaagg 360
146 agtcctctct tcacttctat gactcagaga tggagcagct ctcttttqct gaagaagcag 420
147 aggtgtccag gcaacacata aacacatggg tctccaaaca aactgaagggt aaaattccag 480
148 agttgttgtc aggtggctcc gtogattcag aaaccaggct ggttctcctc aatgccttat 540
149 attttaaagg aaagtggcat caaccattta acaaagagta cacaatggac atgcccttta 600
150 aaataaaciaa ggatgagaaa aggccagtg cagtgatgtg tctgtgaagac acatataacc 660
151 tcgcctatgt gaaggagggt caggcgcaag tgctgggtgat gccatatgaa ggaatggagc 720
152 tgagcttggg ggttctgtct ccagatgagg gtgtggacct cagcaagggt gaaaacaatc 780
153 tcacttttga gaagttaaca gcctggatgg aagcagattt tatgaagagc actgatgttg 840
154 aggttttctt tccaaaattt aaactccaag aggattatga catggagtct ctgtttcagc 900
155 gcttgggagt ggtggatgtc ttccaagagg acaaggctga cttatcagga atgtctccag 960
156 agagaaacct gtgtgtgtcc aagtttgttc accagagtgt agtggagatc aatgaggaag 1020
157 gcacagaggc tgcagcagcc tctgccatca tagaattttg ctgtgcctct tctgtcccaa 1080
158 cattctgtgc tgaccacccc tctcttttct tcatcaggca caacaaagca aacagcatcc 1140
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162 tctccctgtc ttgaatgcat ctatgccctt taccaggtta tgtctaataa tgccaaatac 1380
163 cttctgctat gctattgatt gatagcctag ccagtaattt atagccagtt agaactgact 1440
164 tgactgtgca agaatgctat aatggagcta gagagaaggc acaaacacta ggaaagggtg 1500
165 ctgtttttgc agaggacaca gggacatttc ccaccactca catggctgct tacaacctct 1560
166 ggaaattcca gtttctgtcc atgacttgat tcttttcttt ggcttctact ggctccagca 1620
167 tcttgcacat acatgtatcg tcattcagtt acacacaaac aagtaaaatt ttaaaaataa 1680
168 ataaaaattt aaagagagag tctaaaattt tagtaatggt tagataatag ctgctattgt 1740
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170 catcagtgcc ccggaattc
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174 <211> LENGTH: 374
175 <212> TYPE: PRT
176 <213> ORGANISM: Mus musculus
178 <400> SEQUENCE: 4
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182 Lys Met Leu Cys Gln Ser Asn Pro Ser Lys Asn Val Cys Tyr Ser Pro
183             20             25             30
185 Ala Ser Ile Ser Ser Ala Leu Ala Met Val Leu Leu Gly Ala Lys Gly
186             35             40             45
188 Gln Thr Ala Val Gln Ile Ser Gln Ala Leu Gly Leu Asn Lys Glu Glu
189             50             55             60

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191 Gly Ile His Gln Gly Phe Gln Leu Leu Leu Arg Lys Leu Asn Lys Pro
192   65              70              75              80
194 Asp Arg Lys Tyr Ser Leu Arg Val Ala Asn Arg Leu Phe Ala Asp Lys
195              85              90              95
197 Thr Cys Glu Val Leu Gln Thr Phe Lys Glu Ser Ser Leu His Phe Tyr
198              100             105             110
200 Asp Ser Glu Met Glu Gln Leu Ser Phe Ala Glu Glu Ala Glu Val Ser
201              115             120             125
203 Arg Gln His Ile Asn Thr Trp Val Ser Lys Gln Thr Glu Gly Lys Ile
204              130             135             140
206 Pro Glu Leu Leu Ser Gly Gly Ser Val Asp Ser Glu Thr Arg Leu Val
207 145             150             155             160
209 Leu Ile Asn Ala Leu Tyr Phe Lys Gly Lys Trp His Gln Pro Phe Asn
210              165             170             175
212 Lys Glu Tyr Thr Met Asp Met Pro Phe Lys Ile Asn Lys Asp Glu Lys
213              180             185             190
215 Arg Pro Val Gln Met Met Cys Arg Glu Asp Thr Tyr Asn Leu Ala Tyr
216              195             200             205
218 Val Lys Glu Val Gln Ala Gln Val Leu Val Met Pro Tyr Glu Gly Met
219              210             215             220
221 Glu Leu Ser Leu Val Val Leu Leu Pro Asp Glu Gly Val Asp Leu Ser
222 225             230             235             240
224 Lys Val Glu Asn Asn Leu Thr Phe Glu Lys Leu Thr Ala Trp Met Glu
225              245             250             255
227 Ala Asp Phe Met Lys Ser Thr Asp Val Glu Val Phe Leu Pro Lys Phe
228              260             265             270
230 Lys Leu Gln Glu Asp Tyr Asp Met Glu Ser Leu Phe Gln Arg Leu Gly
231              275             280             285
233 Val Val Asp Val Phe Gln Glu Asp Lys Ala Asp Leu Ser Gly Met Ser
234              290             295             300
236 Pro Glu Arg Asn Leu Cys Val Ser Lys Phe Val His Gln Ser Val Val
237 305             310             315             320
239 Glu Ile Asn Glu Glu Gly Thr Glu Ala Ala Ala Ser Ala Ile Ile
240              325             330             335
242 Glu Phe Cys Cys Ala Ser Ser Val Pro Thr Phe Cys Ala Asp His Pro
243              340             345             350
245 Phe Leu Phe Phe Ile Arg His Asn Lys Ala Asn Ser Ile Leu Phe Cys
246              355             360             365
248 Gly Arg Phe Ser Ser Pro
249              370
254 <210> SEQ ID NO: 5
255 <211> LENGTH: 9
256 <212> TYPE: PRT
257 <213> ORGANISM: Mus musculus
259 <400> SEQUENCE: 5
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261   1              5
264 <210> SEQ ID NO: 6
265 <211> LENGTH: 9

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266 <212> TYPE: PRT
267 <213> ORGANISM: Mus musculus
269 <400> SEQUENCE: 6
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275 <211> LENGTH: 11
276 <212> TYPE: PRT
277 <213> ORGANISM: Mus musculus
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285 <211> LENGTH: 31
286 <212> TYPE: DNA
287 <213> ORGANISM: Mus musculus
289 <400> SEQUENCE: 8
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294 <211> LENGTH: 18
295 <212> TYPE: DNA
296 <213> ORGANISM: Mus musculus
298 <400> SEQUENCE: 9
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302 <210> SEQ ID NO: 10
303 <211> LENGTH: 22
304 <212> TYPE: DNA
305 <213> ORGANISM: Mus musculus
307 <400> SEQUENCE: 10
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311 <210> SEQ ID NO: 11
312 <211> LENGTH: 21
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314 <213> ORGANISM: Mus musculus
316 <400> SEQUENCE: 11
317 tgcacccaag agaaccatag c           21
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321 <211> LENGTH: 34
322 <212> TYPE: DNA
323 <213> ORGANISM: Mus musculus
325 <400> SEQUENCE: 12
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330 <211> LENGTH: 24
331 <212> TYPE: DNA
332 <213> ORGANISM: Mus musculus
334 <400> SEQUENCE: 13
335 ccatcaaacc attccttctg tagc           24
338 <210> SEQ ID NO: 14

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VERIFICATION SUMMARY

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